

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A transmission power control system ~~for controlling, comprising:~~
a base station; and
a mobile station in communication with said base station, such that at a time of wireless communication between a base station and a mobile station, a transmission power from the base station to the mobile station is controlled to an optimum value by using a desired SIR (signal power versus noise power ratio), wherein:
the-a desired SIR is preset on the basis of a communication quality of the communication and a degree of follow-up of the-a received SIR from the desired SIR, and the degree of follow-up of the desired SIR by the received SIR is decided by the absolute value of the difference between the desired SIR and the received SIR.
2. (Cancelled)
3. (Currently Amended) The transmission power control system according to claim 1, wherein the degree of follow-up of the desired SIR by the received SIR is decided by the-a time integral of the absolute value of difference between the desired SIR and thea measured value of the received SIR.
4. (Currently Amended) The transmission power control system according to ~~claim 2~~claim 1, wherein the absolute value of the difference between the desired value and the measured value is compared with a predetermined threshold, and the desired SIR is increased or reduced based on the result of the comparison.
5. (Currently Amended) The transmission power control system according to claim 1, wherein the desired SIR value is stored, and the newly preset desired SIR value is also stored in thea memory.
6. (Currently Amended) The transmission power control system according to claim 1, wherein the desired SIR is controlled by the desired~~a~~ SIR controller by reading out thea desired communication quality value from a demodulator, reading out the

desired communication quality value from a communication quality measuring part, reading out ~~thea~~ measured SIR value from an SIR measuring unit from a memory, and reading out the measured SIR value from ~~thea~~ SIR measuring part.

7. (Currently Amended) The transmission power control system according to claim 1, wherein the wireless communication between the base station and the mobile station comprises a wireless communication system including a Wideband Code Division Multiple Access (W-CDMA) W-CDMA system using outer loop transmission power control.

8. (Currently Amended) A transmission power controlling system comprising: a communication quality measuring part for measures parameters representing the communication quality including anyat least one of Bit Error Ratio (BER) BER and Block Error Ratio (BLER) BLER;

~~an SIR~~ a Signal-to-interference ratio (SIR) measuring part for measuring ~~thea~~ SIR of a received signal;

a demodulating part for demodulating various data from their received signals; and

a desired SIR control part for determining a desired SIR value based on ~~thea~~ desired value and a measured value of the communication quality and the desired value and measured value of SIR, wherein

the desired SIR control part reads, a desired communication quality value from the demodulating part, the desired communication quality value from the communication quality measuring part, a measured SIR value from the SIR measuring part from a memory, and the measured SIR value from the SIR measuring part.

9. (Currently Amended) The transmission power control system according to claim 2 claim 1, wherein the desired SIR value is stored, and the newly preset desired SIR value is also stored in ~~thea~~ memory.

10. (Currently Amended) The transmission power control system according to claim 3, wherein the desired SIR value is stored, and the newly preset desired SIR value is also stored in ~~thea~~ memory.

11. (Currently Amended) The transmission power control system according to claim 4, wherein the desired SIR value is stored, and the newly preset desired SIR value is also stored in ~~the~~ a memory.

12. (Currently Amended) The transmission power control system according to ~~claim 2~~claim 1, wherein the desired SIR is controlled by ~~the desired~~ a SIR controller by reading out ~~the~~ a desired communication quality value from a demodulator, reading out the desired communication quality value from a communication quality measuring part, reading out ~~the~~ a measured SIR value from an SIR measuring unit from a memory, and reading out the measured SIR value from the SIR measuring part.

13. (Currently Amended) The transmission power control system according to claim 3, wherein the desired SIR is controlled by ~~the desired~~ a SIR controller by reading out ~~the~~ a desired communication quality value from a demodulator, reading out the desired communication quality value from a communication quality measuring part, reading out ~~the~~ a measured SIR value from an SIR measuring unit from a memory, and reading out the measured SIR value from the SIR measuring part.

14. (Currently Amended) The transmission power control system according to claim 4, wherein the desired SIR is controlled by ~~the desired~~ a SIR controller by reading out ~~the~~ a desired communication quality value from a demodulator, reading out the desired communication quality value from a communication quality measuring part, reading out ~~the~~ a measured SIR value from an SIR measuring unit from a memory, and reading out the measured SIR value from the SIR measuring part.

15. (Currently Amended) The transmission power control system according to claim 5, wherein the desired SIR is controlled by ~~the desired~~ a SIR controller by reading out ~~the~~ a desired communication quality value from a demodulator, reading out the desired communication quality value from a communication quality measuring part, reading out ~~the~~ a measured SIR value from an SIR measuring unit from a memory, and reading out the measured SIR value from the SIR measuring part.

16. (Currently Amended) The transmission power control system according to ~~claim 2~~claim 1, wherein the wireless communication between the base station and the mobile station comprises a wireless communication system including a W-CDMA system using outer loop transmission power control.

17. (Previously Presented) The transmission power control system according to claim 3, wherein the wireless communication between the base station and the mobile station comprises a wireless communication system including a W-CDMA system using outer loop transmission power control.

18. (Previously Presented) The transmission power control system according to claim 4, wherein the wireless communication between the base station and the mobile station comprises a wireless communication system including a W-CDMA system using outer loop transmission power control.

19. (Previously Presented) The transmission power control system according to claim 5, wherein the wireless communication between the base station and the mobile station comprises a wireless communication system including a W-CDMA system using outer loop transmission power control.

20. (Previously Presented) The transmission power control system according to claim 6, wherein the wireless communication between the base station and the mobile station comprises a wireless communication system including a W-CDMA system using outer loop transmission power control.